

## Membership to CALCE Web Resources

The NASA Electronic Parts and Packaging (NEPP) Program and the Computer Aided Life Cycle Engineering (CALCE) Electronic Products and Systems Center partnership will provide research, development strategies and methodologies for selecting and evaluating electronic parts and packaging technologies on future NASA projects and missions.

The CALCE Consortium provides an organizational structure lead by the CALCE Center located at the University of Maryland, through which different sectors of the electronics industry supply chain can participate in research, share information, and influence practices and policies. The CALCE Consortium research is focused on the identification and development of technologies, methodologies, and guidelines for assessing, mitigating, and managing the risk associated with the design, manufacture, and fielding of electronic products and system. Over fifty industry and government sites participate annually in the CALCE Consortium.

In FY01, NASA's CALCE Consortium membership was limited to GSFC, but will soon expand to be NASA wide. The collaboration between NASA and CALCE will afford NASA engineers the opportunity to interact with CALCE and gain access to CALCE web resources through individual CALCE Web Accounts. CALCE Web Accounts are available to NASA personnel located at sites participating in the NASA-wide CALCE Consortium membership. To obtain a CALCE Web Account, fill out the form found on the link below. Your information will then go through the approval process.

<http://www.calce.umd.edu/accountrequest.html>

Having a CALCE Web Account provides an individual with access to:

- Current research activities (over 30 research projects are being conducted this year).
- Over 400 articles published by the faculty of CALCE Electronic Products and Systems Center
- Over 20 web resources, generated from CALCE research, that contain guidelines, methods, references, interactive software, and other information in areas such as:

Accelerated Testing  
Supply Chain Management  
Micro Electro Mechanical Systems (MEMs)  
Integrated Passives  
Reliability Assessment  
Failure Mechanisms  
High Temperature Electronic Packaging  
Plastic Encapsulated Microcircuits (PEMs)  
Electronic Packaging Materials  
Virtual Qualification

- Software for performing virtual qualification of electronic hardware.

The list of sites participating in the NASA-wide CALCE Consortium Membership along with respective points of contact is provided below:

|                   |                              |                |
|-------------------|------------------------------|----------------|
| Dr. Jih-Fen Lei   | Glenn Research Center        | (216) 433-6328 |
| Mr. Darryl Lakins | Goddard Space Flight Center  | (301) 286-6631 |
| Mr. Sammy Kayali  | Jet Propulsion Laboratory    | (818) 354-6830 |
| Mr. Otis Riggins  | Langley Research Center      | (757) 864-3807 |
| Mr. David Beverly | Johnson Space Center         | (281) 483-0250 |
| Mr. Trent Griffin | Marshall Space Flight Center | (256) 544-6984 |